

## R E M A R K S

Careful review and examination of the subject application are noted and appreciated.

### FINALITY OF THE OFFICE ACTION

Applicant's representative respectfully requests reconsideration of the finality of the 11/09/2004 Office Action.

37 CFR §1.104(b) states:

(b) *Completeness of examiner's action.* The examiner's **action will be complete as to all matters**, except that in appropriate circumstances, such as misjoinder of invention, fundamental defects in the application, and the like, the action of the examiner may be limited to such matters of form need not be raised by the examiner until a claim is found allowable. (Emphasis added)

MPEP §706.07 further states:

In making the final rejection, all outstanding ground of rejection of record should be carefully reviewed, and any such grounds relied on in the final rejection should be reiterated. They **must also be clearly developed to such an extent that applicant may readily judge the advisability of an appeal** unless a single previous Office action contains a complete statement supporting the rejection. (Emphasis added)

The 11/09/2004 Office Action fails to clearly developed the rejections for claims 3, 4 and 20. Claims 3 and 4 were amended after the 04/02/2004 Office Action yet the 11/09/2004 Office Action merely repeats the 04/02/2004 rejections without accounting for the amendments. Furthermore, the 11/09/2004 Office Action does not appear to provide any arguments addressing claim 20. In particular, none of the arguments on pages 11-12 of the 11/09/2004

Office Action make any reference to the claimed length circuit or the claimed length signal. As such, the finality of the rejections is premature and should be withdrawn.

#### **OBJECTION TO THE DRAWINGS**

Applicant has obviated the objection to the drawings submitting new drawings showing the changes requested by the Examiner in red. Approval of the proposed drawing change is respectfully requested.

#### **OBJECTION TO THE CLAIMS**

The objection to the preamble of claim 14 for informalities is respectfully traversed and should be withdrawn. "The determination of whether a preamble limits a claim is made on a case-by-case basis in light of the facts in each case..." (MPEP §2111.02). Since the preamble "An apparatus" does not appear to limit the claimed invention, the text of claim 14 following "comprising:" already particularly points out and distinctly claims the invention. As such, claim 14 is fully compliant with 37 CFR 1.75 and the rejection should be withdrawn.

#### **CLAIM REJECTIONS UNDER 35 U.S.C. §112**

The rejection of claims 2-5 and 16-20 under 35 U.S.C. §112, first paragraph, is respectfully traversed and should be withdrawn.

The 11/09/2004 Office Action fails to (i) identify the claim limitations at issue and (ii) fails to establish by a preponderance of evidence that the unidentified claim elements are new matter. MPEP §2163.III.A states:

The examiner has the initial burden of presenting by a preponderance of evidence why a person skilled in the art would not recognize in an applicant's disclosure a description of the invention defined by the claims. *Wertheim*, 541 F.2d at 263, 191 USPQ at 97. In rejecting a claim, the examiner must set forth express findings of fact regarding the above analysis which support the lack of written description conclusion. These findings should:

- (A) Identify the claim limitation at issue and
- (B) Establish a *prima facie* case by providing reasons why a person skilled in the art at the time the application was filed would not have recognized that the inventor was in possession of the invention as claimed in view of the disclosure of the application as filed.

The 11/09/2004 Office Action merely provides a conclusory statement that the claims "introduce new matter not previously disclosed." Therefore, a *prima facie* case has not been established as required by MPEP §2163. As such, the Examiner is respectfully requested to either (i)(a) clearly identify the claim limitations asserted as new matter and (b) establish a *prima facie* case for the assertion or (ii) withdraw the rejection.

#### **CLAIM REJECTIONS UNDER 35 U.S.C. §103**

The rejection of claims 1-6, 8, 14 and 16-20 under 35 U.S.C. §103(a) as being unpatentable over Agarwal et al '669 (hereafter Agarwal) in view of Doshi et al., EP 0942 569 A2 (hereafter Doshi) is respectfully traversed and should be withdrawn.

The rejection of claim 7 under 35 U.S.C. §103(a) as being unpatentable over Agarwal in view of Doshi and Zhu '847 is respectfully traversed and should be withdrawn.

Agarwal concerns a method and apparatus for adaptive control of forward error correction codes (Title). Doshi concerns a Simple Data Link (SDL) protocol (Title). Zhu concerns a device and method of signal loss recovery for realtime and/or interactive communications (Title).

In contrast, claim 1 provides (in part) a step for receiving a frame comprising a length field storing a length value for a combined length **consisting of** (i) a payload field and (ii) a payload error detection field. However, neither a SIZE0 field nor a CODING field of Agarwal alone appear to cover both a data payload 240 field and a forward error correction code 250 field of Agarwal. The length field of Doshi appears to cover (i) a protocol field, (ii) an information field and (iii) an FCS field. Therefore, Agarwal and Doshi, alone or in combination, do not appear to teach or suggest a step for receiving a frame comprising a length field storing a length value for a combined length **consisting of** (i) a payload field and (ii) a payload error detection field as presently claimed.

Furthermore, Applicant's representative respectfully traverses the assertion on page 5 of the 11/09/2004 Office Action that "specifying the length of the variable portion is inherently equivalent to specifying the total length". Inherency requires certainty of results, not mere possibility. See, e.g., *Ethyl*

*Molded Products Co. v. Betts Package, Inc.*, 9 U.S.P.Q. 2d 1001 (E.D.Ky 1988). See also, *In re Oelrich*, 666 F.2d 578, 581, 212 USPQ 323, 326 (C.C.P.A. 1981). In contrast, the 11/09/2004 Office Action admits on page 6 that "Agarwal explicitly teach the adaptive coding scheme selects the optimal forward error correction code length and that the decoding and coding is based upon the forward error correction code length." Agarwal appears to contemplate that several different forward error correction code lengths may be used for any given variable portion length for optimization. Therefore, no certainty exists that a total length may be determined from a specific variable portion length. As such, no inherency exists as asserted in the 11/09/2004 Office Action.

No evidence of motivation to modify or combine the references has been provided in either the 04/02/2004 Office Action or the 11/09/2004 Office Action. The alleged motivation on page 8 of the 04/02/2004 Office Action "to provide protection for important control information contained in the header" appears to be credited to the Abstract of Doshi per page 7 of the 11/09/2004 Office Action. However, the Abstract of Doshi does not appear to contain the alleged motivation. Therefore, *prima facie* obviousness has not been established for lack of clear and particular evidence of motivation. Claim 14 provides language similar to claim 1. As such, the claimed invention is fully patentable over the cited references and the rejection should be withdrawn. If the rejection is maintained, the Examiner is respectfully requested to quote the language in the Abstract of Doshi providing the alleged motivation

and provide a clear and concise explanation why one of ordinary skill in the art would be motivated by the quote to combine Doshi and Agarwal.

Claim 2 provides (in part) a step for marking a start of a payload field in response to an intermediate error detection value matching a received value. In contrast, Doshi appears to contemplate (FIG. 3) a length indicator defining a length of a protocol field, an information field and a FCS field. Doshi appears to be silent regarding the length indicator field marking a start of the information field carrying the actual data. Therefore, Agarwal and Doshi, alone or in combination, do not appear to teach or suggest a step for marking a start of a payload field in response to an intermediate error detection value matching a received value as presently claimed.

Furthermore, none of the arguments in the 11/09/2004 Office Action on pages 7-8 regarding claim 2 appear to address the step for marking a start of a payload field in response to an intermediate error detection value matching a received value as presently claimed. Therefore, *prima facie* obviousness has not been established for lack of evidence that the references teach all of the claim limitations. As such, claim 2 is fully patentable over the cited references and the rejection should be withdrawn.

Claim 3 provides a step for advancing a buffer such that at least one of a plurality of received bytes moves from a first predetermined group into a second predetermined group. In contrast, the 11/09/2004 Office Action fails to argue that the

claimed step is taught or suggested by the references. The 04/02/2004 Office Action could not argue the above claimed step which was added in the 06/28/2004 Amendment. Therefore, *prima facie* obviousness has not been established.

Claim 3 further provides a step for buffering at least one subsequent byte of the received bytes into the first predetermined group in response to the intermediate error detection value being different than a buffered value. In contrast, the 11/09/2004 Office Action fails to argue that the claimed step is taught or suggested by the references. The 04/02/2004 Office Action could not argue the above claimed step which was altered in the 06/28/2004 Amendment. Therefore, *prima facie* obviousness has not been established. As such, the Examiner is respectfully requested to either (i) provide a new Office Action with evidence how claim 3 is allegedly taught by the references or (ii) withdraw the rejection.

Claim 4 provides a step for generating a length signal conveying said length value from said first predetermined group in response to said intermediate error detection value matching said received value. In contrast, the 11/09/2004 Office Action fails to argue that the claimed step is taught or suggested by the references. The 04/02/2004 Office Action could not argue the above claimed step which was altered in the 06/28/2004 Amendment. Therefore, *prima facie* obviousness has not been established. As such, the Examiner is respectfully requested to either (i) provide

a new Office Action with evidence how claim 4 is allegedly taught by the references or (ii) withdraw the rejection.

Claim 5 provides a step for separating a payload data from a payload error detection data based upon both a length value and **a predetermined value**. In contrast, Agarwal appears to be silent regarding how payload data is separated from a payload RS CRC error check. Therefore, Agarwal does not appear to teach or suggest that the separation is based on (i) a length value and (ii) **a predetermined value**. Furthermore, Doshi does not appear to fill the silence of Agarwal for separating based on a length value and **a predetermined value**. Therefore, Agarwal and Doshi, alone or in combination, do not appear to teach or suggest a step for separating a payload data from a payload error detection data base upon both a length value and a predetermined value as presently claimed.

Furthermore, the arguments on pages 8-9 of the 11/09/2004 Office Action fail to address the claimed predetermined value. Therefore, *prima facie* obviousness has not been established for lack of evidence that the references teach all of the claim limitations. As such, claim 5 is fully patentable over the cited references and the rejection should be withdrawn.

Furthermore, Applicant's representative respectfully traverses the assertion on page 9 of the 11/09/2004 Office Action that specifying a variable portion length "can inherently be used



to determine the length of the combined payload field". MPEP §2112 states:

"In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. " *Ex parte Levy* 17 USPQ2d 1461, 1464, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original)

However, no evidence or reasoning has been provided in the 11/09/2004 Office Action why determining a length of "a combined payload field" necessarily flows from specifying a variable portion length. As such, inherency has not been established.

Claim 7 provides steps for (A) determining a second length value based upon (i) a payload length of payload data and (ii) a second payload error detection length of a second payload error detection value, (B) calculating a second length error detection value for the second length value and (C) inserting (i) the second length value, (ii) the second length error detection value, (iii) the payload data, and (iv) the second payload error detection value into a second frame, wherein the payload data and the second payload error detection value occupy separate fields of the second frame. In contrast, each of Agarwal, Doshi and Zhu appear to be silent regarding generation of a second frame incorporating the data from a first frame. Therefore, Agarwal, Doshi and Zhu, alone or in combination, do not appear to teach or suggest steps for (A) determining a second length value based upon (i) a payload length of payload data and (ii) a second payload

error detection length of a second payload error detection value, (B) calculating a second length error detection value for the second length value and (C) inserting (i) the second length value, (ii) the second length error detection value, (iii) the payload data, and (iv) the second payload error detection value into a second frame, wherein the payload data and the second payload error detection value occupy separate fields of the second frame as presently claimed.

Furthermore, the assertion on pages 12-13 of the 04/02/2004 Office Action that it would have been obvious to repackage the same frame as a previously sent frame appears to be a conclusory statement. No evidence has been provided that Zhu, Agarwal and/or Doshi teach **repackaging** a frame. In particular, the 04/02/2004 Office Action only asserts on page 12 that Zhu teaches retransmitting (not repackaging) a frame for the purposes of recovering lost or damaged data. Therefore, *prima facie* obviousness has not been established.

Furthermore, the arguments on page 9 of the 11/09/2004 Office Action appear to be discussing determining an bit error rate. However, no arguments are presented addressing repackaging a frame as presently claimed. Therefore, *prima facie* obviousness has not been established. As such, claim 7 is fully patentable over the cited references and the rejection should be withdrawn.

Claim 8 provides that steps (A) through (C) are stored in a storage medium as a computer program that is readable and executable by a computer to delineate a frame. In contrast,

neither the 04/02/2004 Office Action or the 11/09/2004 Office Action provide motivation to modify the reference from either the references themselves or knowledge generally available to one of ordinary skill in the art as required by MPEP §2142. In particular, the claimed motivation "use of a computer program for executing the steps of claim 1 stored in a computer readable medium would have provided the opportunity to implement the method of claim 1" appears to be improperly using claim 1 as the basis for the motivation. Therefore, the Examiner is respectfully requested to either (i) clearly identify the source of the alleged motivation, and if knowledge generally available, provide evidence thereof or (ii) withdraw the rejection.

Claim 16 provides a structure including a counter and a demultiplexer. In contrast, Doshi and Agarwal each appear to be silent regarding both a counter and a demultiplexer as presently claimed. Furthermore, the 11/09/2004 Office Action only cites one element of Agarwal in an attempt to reject two claimed elements. Therefore, the 11/09/2004 Office Action fails to establish the two claimed elements. As such, claim 16 is fully patentable over the cited references and the rejection should be withdrawn.

Claim 17 provides a buffer circuit. In contrast, the 11/09/2004 Office Action fails to provide any evidence or convincing line of reasoning why one of ordinary skill in the art would consider a disassembler of Agarwal to be the same as a buffer as presently claimed. Therefore, *prima facie* obviousness has not been established and the rejection should be withdrawn.

Claim 18 provides a length circuit configured to generate an intermediate error detection value from a first predetermined group of received bytes in a buffer circuit. In contrast, the 11/09/2004 Office Action appears to be arguing that a step 520 of Doshi calculates a CRC check (asserted similar to the claimed intermediate error detection value) from data stored in a RAM 1060 of Agarwal. However, Doshi appears to be silent regarding use of data from Agarwal. Furthermore, the 11/09/2004 Office Action provides no evidence or convincing line of reasoning why one of ordinary skill in the art would be motivated to modify the step 520 of Doshi to use data from the RAM 1060 of Agarwal. Therefore, *prima facie* obviousness has not been established and the rejection should be withdrawn.

Claim 19 provides a compare circuit configured to generate a pass signal by comparing an intermediate error detection value to a received value defined by a second group of received bytes in a buffer circuit. In contrast, the 11/09/2004 Office Action appears to be arguing that a step 520 of Doshi compares a CRC check (asserted similar to the claimed intermediate error detection value) to a header CRC (asserted similar to the claimed received value) that is stored in a RAM 1060 of Agarwal. However, Doshi appears to be silent regarding storing the Header CRC in the RAM 1060 of Agarwal. Furthermore, the 11/09/2004 Office Action makes no argument that one of ordinary skill in the art would be motivated to modify Doshi to store the Header CRC in the RAM 1060

of Agarwal. Therefore, *prima facie* obviousness has not been established and the rejection should be withdrawn.

Claim 20 provides a length circuit configured to generate a length signal conveying a length value to a counter in response to an intermediate error detection value matching a received value. In contrast, the 11/09/2004 Office Action appears to be silent regarding Doshi and/or Agarwal teaching a length circuit as presently claimed. Therefore, *prima facie* obviousness has not been established. As such, the Examiner is respectfully requested to either (i) provide a new Office Action with evidence how claim 20 is allegedly taught by the references or (ii) withdraw the rejection.


Accordingly, the present application is in condition for allowance. Early and favorable action by the Examiner is respectfully solicited.

The Examiner is respectfully invited to call the Applicant's representative should it be deemed beneficial to further advance prosecution of the application.

If any additional fees are due, please charge our office  
Account No. 50-0541.

Respectfully submitted,

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